



ENTERED

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/544,517

DATE: 03/14/2002

TIME: 14:13:00

Input Set : A:\410.app

Output Set: N:\CRF3\03142002\I544517.raw

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4 <110> APPLICANT: Luche, Ralf M.
5      Wei, Bo
7 <120> TITLE OF INVENTION: DSP-4 DUAL-SPECIFICITY PHOSPHATASE
10 <130> FILE REFERENCE: 200125.410
12 <140> CURRENT APPLICATION NUMBER: US 09/544,517
13 <141> CURRENT FILING DATE: 2000-04-06
15 <160> NUMBER OF SEQ ID NOS: 21
17 <170> SOFTWARE: FastSEQ for Windows Version 4.0
19 <210> SEQ ID NO: 1
20 <211> LENGTH: 1087
21 <212> TYPE: DNA
22 <213> ORGANISM: Homo sapien
24 <400> SEQUENCE: 1
25 acattgcac cctgggataa acggacctgg acaactcact ctcttgggtct gtggctgctg      60
26 cggttacctg gatgggcgaa cacctctgag gctggctttg ttacctgggc aataagggac      120
27 tagcagttca gccgttttct atgcctgctg gatttggttg tatttggtcc cagccactgc      180
28 tcatgtaatg tactccctta accaggaaat taaagcattc tcccgggaata atctcaggaa      240
29 gcaatgcacc aggggtgaaa cgctaactgg aaagaaaatt atagaaacat ggaaagatgc      300
30 cagaattcat gttgtggaag aagtagagcc gagcagtggg ggtgggttggt gttatgtgca      360
31 ggaccttagc tcggacctgc aagttggcgt tattaagcca tggttgctcc tagggtcaca      420
32 agatgctgct catgatttgg atacactgaa aaagaataag gtgactcata ttcttaattg      480
33 tgcatatgga gttgaaaatg ctttcctcag tgactttaca tataagagca ttcttatatt      540
34 ggatctgcct gaaaccaaca tcctgtctta tttccagaa tgttttgaat ttattgaaga      600
35 agcaaaaaa aaagatggag tggttcttgt tcattgtaat gcaggcggtt ccagggtgctgc      660
36 tgcaattgta ataggtttcc tgatgaattc tgaacaaacc tcatttacca gtgctttttc      720
37 tttggtgaaa aatgcaagac cttccatatg tccaaattct ggcttcatgg agcagcttcg      780
38 tacatatcaa gagggcaaag aaagcaataa gtgtgacaga atacaggaga acagttcatg      840
39 agttgcattg tagcagacaa tggacaactg tagtttctga attgacttct atagccatct      900
40 tttccctttt ttggagagta gactagcaaa actccctttt ttctcttgcc ttttttatgc      960
41 ataaatggag gtcaatctga ttgtcctgac ctactgtata agtaaatttc aaatgtcatt      1020
42 actttctctt tgttattata atgtgtgatt aaatgctttt ttaaattgct aagggaaaaa      1080
43 aaaaaaa
45 <210> SEQ ID NO: 2
46 <211> LENGTH: 217
47 <212> TYPE: PRT
48 <213> ORGANISM: Homo sapien
50 <400> SEQUENCE: 2
51 Met Tyr Ser Leu Asn Gln Glu Ile Lys Ala Phe Ser Arg Asn Asn Leu
52 1      5      10      15
53 Arg Lys Gln Cys Thr Arg Val Thr Thr Leu Thr Gly Lys Lys Ile Ile
54      20      25      30
55 Glu Thr Trp Lys Asp Ala Arg Ile His Val Val Glu Glu Val Glu Pro
56      35      40      45

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57 Ser Ser Gly Gly Gly Cys Gly Tyr Val Gln Asp Leu Ser Ser Asp Leu
58      50                      55                      60
59 Gln Val Gly Val Ile Lys Pro Trp Leu Leu Leu Gly Ser Gln Asp Ala
60 65                      70                      75                      80
61 Ala His Asp Leu Asp Thr Leu Lys Lys Asn Lys Val Thr His Ile Leu
62                      85                      90                      95
63 Asn Val Ala Tyr Gly Val Glu Asn Ala Phe Leu Ser Asp Phe Thr Tyr
64                      100                     105                     110
65 Lys Ser Ile Ser Ile Leu Asp Leu Pro Glu Thr Asn Ile Leu Ser Tyr
66                      115                     120                     125
67 Phe Pro Glu Cys Phe Glu Phe Ile Glu Glu Ala Lys Arg Lys Asp Gly
68                      130                     135                     140
69 Val Val Leu Val His Cys Asn Ala Gly Val Ser Arg Ala Ala Ala Ile
70 145                      150                     155                     160
71 Val Ile Gly Phe Leu Met Asn Ser Glu Gln Thr Ser Phe Thr Ser Ala
72                      165                     170                     175
73 Phe Ser Leu Val Lys Asn Ala Arg Pro Ser Ile Cys Pro Asn Ser Gly
74                      180                     185                     190
75 Phe Met Glu Gln Leu Arg Thr Tyr Gln Glu Gly Lys Glu Ser Asn Lys
76                      195                     200                     205
77 Cys Asp Arg Ile Gln Glu Asn Ser Ser
78      210                      215
80 <210> SEQ ID NO: 3
81 <211> LENGTH: 14
82 <212> TYPE: PRT
83 <213> ORGANISM: Homo sapien
85 <400> SEQUENCE: 3
86 Val His Cys Asn Ala Gly Val Ser Arg Ala Ala Ala Ile Val
87 1      5      10
89 <210> SEQ ID NO: 4
90 <211> LENGTH: 23
91 <212> TYPE: PRT
92 <213> ORGANISM: Homo sapien
94 <400> SEQUENCE: 4
95 Gly Arg Val Leu Val His Cys Gln Ala Gly Ile Ser Arg Ser Gly Thr
96 1      5      10      15
97 Asn Ile Leu Ala Tyr Leu Met
98      20
100 <210> SEQ ID NO: 5
101 <211> LENGTH: 27
102 <212> TYPE: DNA
103 <213> ORGANISM: Homo sapien
105 <400> SEQUENCE: 5
106 gcataaaaaa ggcaagagaa aaaaggg
108 <210> SEQ ID NO: 6
109 <211> LENGTH: 24
110 <212> TYPE: DNA
111 <213> ORGANISM: Homo sapien
113 <400> SEQUENCE: 6

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114	cacacttatt gctttctttg ccct	24
116	<210> SEQ ID NO: 7	
117	<211> LENGTH: 25	
118	<212> TYPE: DNA	
119	<213> ORGANISM: Homo sapien	
121	<400> SEQUENCE: 7	
122	gcactggtaa atgaggtttg ttcag	25
124	<210> SEQ ID NO: 8	
125	<211> LENGTH: 18	
126	<212> TYPE: DNA	
127	<213> ORGANISM: Homo sapien	
129	<400> SEQUENCE: 8	
130	agccctggaa acgcctgc	18
132	<210> SEQ ID NO: 9	
133	<211> LENGTH: 25	
134	<212> TYPE: DNA	
135	<213> ORGANISM: Homo sapien	
137	<400> SEQUENCE: 9	
138	ctgaacaaac ctcatttacc agtgc	25
140	<210> SEQ ID NO: 10	
141	<211> LENGTH: 18	
142	<212> TYPE: DNA	
143	<213> ORGANISM: Homo sapien	
145	<400> SEQUENCE: 10	
146	gcaggcgttt ccagggct	18
148	<210> SEQ ID NO: 11	
149	<211> LENGTH: 25	
150	<212> TYPE: DNA	
151	<213> ORGANISM: Homo sapien	
153	<400> SEQUENCE: 11	
154	gagggcгааг aaagcaataa gtgtg	25
156	<210> SEQ ID NO: 12	
157	<211> LENGTH: 27	
158	<212> TYPE: DNA	
159	<213> ORGANISM: Homo sapien	
161	<400> SEQUENCE: 12	
162	gtcacactta ttgctttctt tgccctc	27
164	<210> SEQ ID NO: 13	
165	<211> LENGTH: 20	
166	<212> TYPE: DNA	
167	<213> ORGANISM: Homo sapien	
169	<400> SEQUENCE: 13	
170	gcaggcgttt ccagggctgc	20
172	<210> SEQ ID NO: 14	
173	<211> LENGTH: 170	
174	<212> TYPE: PRT	
175	<213> ORGANISM: Homo sapien	
177	<400> SEQUENCE: 14	
178	Ser Asp Leu Asp Arg Asp Pro Asn Ser Ala Thr Asp Ser Asp Gly Ser	

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179 1          5          10          15
180 Pro Leu Ser Asn Ser Gln Pro Ser Phe Pro Val Glu Ile Leu Pro Phe
181          20          25          30
182 Leu Tyr Leu Gly Cys Ala Lys Asp Ser Thr Asn Leu Asp Val Leu Glu
183          35          40          45
184 Glu Phe Gly Ile Lys Tyr Ile Leu Asn Val Thr Pro Asn Leu Pro Asn
185          50          55          60
186 Leu Phe Glu Asn Ala Gly Glu Phe Lys Tyr Lys Gln Ile Pro Ile Ser
187 65          70          75          80
188 Asp His Trp Ser Gln Asn Leu Ser Gln Phe Phe Pro Glu Ala Ile Ser
189          85          90          95
190 Phe Ile Asp Glu Ala Arg Gly Lys Asn Cys Gly Val Leu Val His Cys
191          100          105          110
192 Leu Ala Gly Ile Ser Arg Ser Val Thr Val Thr Val Ala Tyr Leu Met
193          115          120          125
194 Gln Lys Leu Asn Leu Ser Met Asn Asp Ala Tyr Asp Ile Val Lys Met
195          130          135          140
196 Lys Lys Ser Asn Ile Ser Pro Asn Phe Asn Phe Met Gly Gln Leu Leu
197 145          150          155          160
198 Asp Phe Glu Arg Thr Leu Gly Leu Ser Ser
199          165          170
201 <210> SEQ ID NO: 15
202 <211> LENGTH: 168
203 <212> TYPE: PRT
204 <213> ORGANISM: Homo sapien
206 <400> SEQUENCE: 15
207 Asp Arg Glu Leu Pro Ser Ser Ala Thr Glu Ser Asp Gly Ser Pro Val
208 1          5          10          15
209 Pro Ser Ser Gln Pro Ala Phe Pro Val Gln Ile Leu Pro Tyr Leu Tyr
210          20          25          30
211 Leu Gly Cys Ala Lys Asp Ser Thr Asn Leu Asp Val Leu Gly Lys Tyr
212          35          40          45
213 Gly Ile Lys Tyr Ile Leu Asn Val Thr Pro Asn Leu Pro Asn Ala Phe
214          50          55          60
215 Glu His Gly Gly Glu Phe Thr Tyr Lys Gln Ile Pro Ile Ser Asp His
216 65          70          75          80
217 Trp Ser Gln Asn Leu Ser Gln Phe Phe Pro Glu Ala Ile Ser Phe Ile
218          85          90          95
219 Asp Glu Ala Arg Ser Lys Lys Cys Gly Val Leu Val His Cys Leu Ala
220          100          105          110
221 Gly Ile Ser Arg Ser Val Thr Val Thr Val Ala Tyr Leu Met Gln Lys
222          115          120          125
223 Met Asn Leu Ser Leu Asn Asp Ala Tyr Asp Phe Val Lys Arg Lys Lys
224          130          135          140
225 Ser Asn Ile Ser Pro Asn Phe Asn Phe Met Gly Gln Leu Leu Asp Phe
226 145          150          155          160
227 Glu Arg Thr Leu Gly Leu Ser Ser
228          165
230 <210> SEQ ID NO: 16

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231 <211> LENGTH: 170
232 <212> TYPE: PRT
233 <213> ORGANISM: Homo sapien
235 <400> SEQUENCE: 16
236 Gly Leu Cys Glu Gly Lys Pro Ala Ala Leu Leu Pro Met Ser Leu Ser
237   1               5               10               15
238 Gln Pro Cys Leu Pro Val Pro Ser Val Gly Leu Thr Arg Ile Leu Pro
239           20               25               30
240 His Leu Tyr Leu Gly Ser Gln Lys Asp Val Leu Asn Lys Asp Leu Met
241           35               40               45
242 Thr Gln Asn Gly Ile Ser Tyr Val Leu Asn Ala Ser Asn Ser Cys Pro
243           50               55               60
244 Lys Pro Asp Phe Ile Cys Glu Ser Arg Phe Met Arg Val Pro Ile Asn
245 65           70               75               80
246 Asp Asn Tyr Cys Glu Lys Leu Leu Pro Trp Leu Asp Lys Ser Ile Glu
247           85               90               95
248 Phe Ile Asp Lys Ala Lys Leu Ser Ser Cys Gln Val Ile Val His Cys
249           100              105              110
250 Leu Ala Gly Ile Ser Arg Ser Ala Thr Ile Ala Ile Ala Tyr Ile Met
251           115              120              125
252 Lys Thr Met Gly Met Ser Ser Asp Asp Ala Tyr Arg Phe Val Lys Asp
253           130              135              140
254 Arg Arg Pro Ser Ile Ser Pro Asn Phe Asn Phe Leu Gly Gln Leu Leu
255 145           150              155              160
256 Glu Tyr Glu Arg Thr Leu Lys Leu Leu Ala
257           165              170
259 <210> SEQ ID NO: 17
260 <211> LENGTH: 168
261 <212> TYPE: PRT
262 <213> ORGANISM: Homo sapien
264 <400> SEQUENCE: 17
265 Pro Ala Gln Ala Leu Pro Pro Ala Gly Ala Glu Asn Ser Asn Ser Asp
266   1               5               10               15
267 Pro Arg Val Pro Ile Tyr Asp Gln Gly Gly Pro Val Glu Ile Leu Pro
268           20               25               30
269 Tyr Leu Tyr Leu Gly Ser Cys Asn His Ser Ser Asp Leu Gln Gly Leu
270           35               40               45
271 Gln Ala Cys Gly Ile Thr Ala Val Leu Asn Val Ser Ala Ser Cys Pro
272           50               55               60
273 Asn His Phe Glu Gly Leu Phe His Tyr Lys Ser Ile Pro Val Glu Asp
274 65           70               75               80
275 Asn Gln Met Val Glu Ile Ser Ala Trp Phe Gln Glu Ala Ile Ser Phe
276           85               90               95
277 Ile Asp Ser Val Lys Asn Ser Gly Gly Arg Val Leu Val His Cys Gln
278           100              105              110
279 Ala Gly Ile Ser Arg Ser Ala Thr Ile Cys Leu Ala Tyr Leu Ile Gln
280           115              120              125
281 Ser His Arg Val Arg Leu Asp Glu Ala Phe Asp Phe Val Lys Gln Arg
282           130              135              140

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VERIFICATION SUMMARY

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